

TRANSACTIONS
OF THE
BRITISH SOCIETY FOR THE
STUDY OF ORTHODONTIA.

NOVEMBER, 1908.

PUBLISHED FOR THE SOCIETY BY
THE DENTAL MANUFACTURING COMPANY, LIMITED

BRITISH SOCIETY FOR THE STUDY OF ORTHODONTIA.

ORDINARY MEETING.

AN ordinary meeting was held in the rooms of the Medical Society, Chandos Street, W., on November 11th, 1908.

Mr. J. H. BADCOCK, president, in the chair.

The minutes of the previous meeting were read and confirmed.

The following gentlemen were ballotted for and duly elected members of the society :—Phillip Scott, L.D.S.Eng. ; T. H. Wilkinson, L.D.S.Eng. ; J. A. Bowes, L.D.S.Eng. ; E. N. Mason, L.D.S.Eng. ; and J. M. Sumerling, L.D.S.Eng.

Mr. H. P. Aubrey signed the obligation book, and was formally admitted a member of the society.

Messrs. Schelling and Hedley Visick were elected auditors for the annual general meeting.

The paper promised by Mr. A. C. Lockett on "The Results of Extraction" having been unavoidably postponed, the meeting was devoted to Casual Communications.

UNDERHUNG TEMPORARY TEETH.

MR. PEYTON BALY exhibited two models of a boy, two years and two months old, who had one supernumerary upper incisor and four incisors inside the lower bite. The models were taken in gutta-percha impressions, while the child was under chloroform. He desired to know from the members the best treatment to pursue.

The PRESIDENT said the condition shown was rather rare, as was the method of obtaining the models. If the chloroform was administered for the special purpose of taking the models, it was quite a new departure.

MR. PEYTON BALY said the chloroform was administered for that purpose.

MR. GEORGE NORTHCROFT asked whether it was thought the case would ultimately turn into one under Angle's Class 3. It would be interesting to know whether the lower jaws had a very open angle, as was usual in Class 3 cases. He believed the president had in his possession a set of models of a Class 3 case of temporary dentition and that was the only other case he had seen.

The PRESIDENT thought the models in his possession could hardly be called Class 3, and they were very similar to those Mr. Baly had shown. The four upper incisors were within the lower incisors,

but the other teeth were in their normal relations in Mr. Baly's models.

MR. J. G. TURNER asked that for the benefit of those who did not know Class 3 from Class 1, some specific description should be given. For his own part he did not know one from the other.

MR. NORTHCROFT said he used the expression Class 3 as applied to the temporary dentition. According to the Angle classification there was no Class 3 in the temporary dentition, but anyone who had read Dr. Angle's book would readily understand what he meant, and he took it that the majority of the members of the society had read that work.

MR. TURNER asked whether Dr. Angle's work was to be made the basis of the Orthodontia Society.

MR. NORTHCROFT said no, but it was the basis of his remarks.

MR. A. C. LOCKETT said he would endeavour to describe the condition of Class 3 for Mr. Turner's benefit. It was a condition in which the lower first permanent molar was in mesial occlusion to the upper permanent molar, and all the teeth anterior to the lower first permanent molar in the lower jaw were in like manner in mesial occlusion. It might facilitate discussion if the Angle classification was placed side by side with any other existing classification which might be found useful, so that discussion may be intelligently carried on by all.

RESULTS OF FIRST MOLAR EXTRACTION.

MR. J. G. TURNER exhibited some models to illustrate what happened after extraction of the lower first permanent molar. It was generally said that the second molar came forward; in fact, there were reams of curious arguments written in various books on orthodontia as to what happened, why it happened, and the results; but the fact was that the lower second molar did not come forward; the bicuspid went backwards and the second molar tilted forward and became twisted inwards. Its long axis, instead of being fairly well antero-posterior, tended to run towards the middle. He showed a model to prove his first contention that when the first lower permanent molar was taken out, the second premolar went backwards. If taken out early enough, the premolar went right back into the body of the bone until it abutted against the second molar and there erupted. One side of the premolar was erupting and the other side was fully erupted right against the second permanent molar. It was carried by the bony growth. Another model he exhibited to show how the premolars went backwards until they occupied the space lost by caries of the first permanent lower molar in exactly the same way that upper molars came forward after partial destruction of the temporary teeth. It was an inverse action entirely. One often saw the crowns of the teeth in contact, and it was said that the second permanent molar had come forward. If skiagrams were taken it would be seen the apices of the roots were still as far back as ever, the lower molar having tilted forward. A premolar might have come backwards, but there was still a large space between the roots. He showed skiagrams taken from a girl showing that the

lower molar had tilted while the premolars had gone vertically backwards. The movement of the premolar was partly due to growth of the bone—there was no other power to move the teeth except some actual growth of bone, what one might fancifully call a bone current carrying the teeth backwards—and partly to the action of the lips and the cheeks, exactly as was seen to result from extraction anywhere else ; the teeth were crushed in until they touched each other and the crowns were in stable apposition.

MR. W. J. MAY exhibited a couple of models bearing on the point under discussion. One model showed that on the extraction of the second temporary molar the first permanent molar had not come forward much—it had twisted a little—but the first temporary molar and temporary canine had fallen back in the mouth. One side showed the normal condition with all the temporary molars in place ; the other side showed the result of extraction. He was sorry he did not have a model of the child taken sometime previously to show what was the condition before. The molar was taken out on account of a bad abscess, and he believed it was the removal of the lower temporary molar that was the main cause of the superior protrusion. He believed that owing to the lower canine falling back the lip got inside the left central, which was much further out than the right central. The child was a mouth-breather, which no doubt added to the trouble.

The PRESIDENT asked whether there was any history of thumb sucking or the use of a comforter ?

MR. MAY said he saw the child eighteen months or two years previously, and then noticed nothing the matter. He simply took out the temporary molar for the abscess and about eighteen months after saw the result.

The PRESIDENT said the falling back of the first temporary molar, and the temporary canine, was very marked after the extraction of the second temporary molar in that case. Mr. Turner's statement as to the impossibility of the second permanent molar moving forward after the extraction of the first permanent molar was very interesting, but was rather difficult to discuss without seeing the skiagrams and models. He admitted to being unconvinced, and he was not at all sure that the principle was of universal application.

MR. G. THOMPSON thought it depended very much on the age at which the teeth were extracted. He had cases in his mind where he had extracted the six-year molars just at the time the molars were erupting, and it appeared to him that the twelve-year molars had moved forward, and there was no perceptible tilting.

MR. GEORGE NORTHCROFT said that Mr. Turner had remarked that the only way he could account for the second premolar being in a backward position against the anterior surface of the second molar was by the growth of bone, *i.e.*, that the tooth floated through growing bone. If that was a permissible argument it connoted the possibility of interstitial growth of bone, otherwise with the growth of the jaw the tooth would be moved in a forward direction. He should be extremely happy to think that interstitial growth of bone was possible as it would make him a good deal more confident

in the results of the movements of some of the teeth that he treated, but he had always been taught that in the jaws there was no interstitial growth of bone.

The PRESIDENT said it appeared to him that Mr. Turner's case was that of a syphilitic patient, and therefore would be hardly a fair case to argue from.

MR. TURNER said the teeth were syphilitic, but it was only one case out of a dozen.

The PRESIDENT said that in syphilitic cases the growth of teeth was frequently abnormal, and not infrequently teeth were missing. Therefore he could not quite accept the particular model as evidence of Mr. Turner's contention.

MR. RUSHTON said that the manner in which teeth appeared to travel through bone in a parallel direction to their fellows was very strikingly exemplified in certain chronic cases of pyorrhœa, where teeth could be seen that had moved a considerable distance. There was no tilting; they were perfectly vertical to the plane of the jaw, and yet they had moved a good way. He knew of a case in which a bicuspid had moved at least a quarter of an inch, and it would be interesting to know how that movement occurred.

With regard to Mr. Baly's case it seemed to him the molar occlusion as far as could be judged from the models, would be perfectly normal, and personally he should do nothing whatever in the case but await developments, keeping the teeth in view until the permanent ones erupted.

MR. TURNER said the cases were picked out at random, and he had a good many more photographs and models to show that the condition was such as he had said, that the pre-molars went backwards. As to the molar coming forward when the first molar was taken out at the erupting period, he did not think that held at all. As far as he could see it made no difference; the lower molar came up into its appointed place and then tilted. He did not quite know what was meant by interstitial growth. If he took it aright, it should not have the power of carrying a thing backwards or forwards; it should be simply like the endogenous growth of a palm tree, leaving each central molecule or cell exactly where it was. There should not be a regular movement of one particular portion of the bone with a hard tooth in it backwards or forwards or in an other direction.

MR. NORTHCROFT said he thought Mr. Turner stated that the teeth went back in growing bone, and he took it the bone was not growing there.

MR. TURNER said that it seemed to him the bone was growing, the models showed the bone grew there, and there was perhaps a need for revising ideas as to the direction of growth in the lower jaw. It appeared to him it was quite possible that the lower jaw did grow backwards, and the movement of the molars from the position of development to the vertical position of eruption entailed a backward movement also. Each molar lay slanting forwards in a converse direction to that of the uppers and partly under the molar in front of it, and there actually had to be a movement backwards to disengage the tooth. As to the syphilitic case,

he could show plenty of others, but that happened to be the first that came to hand. As a matter of usefulness to the Society he suggested a small Committee should be formed to investigate specifically what happened in the case of an extraction of a first permanent lower molar. It was a question absolutely of fact beyond the possibility of dispute.

MR. NORTHCROFT thought it might be of interest to the Society to know that in Witzel's book, noticed a little while ago in THE DENTAL RECORD, on the "Development of the Jaw," an illustration was given of Professor Humphry's historic experiment, which proved that the jaw grew only by additions of bone backwards. The jaw of a pig was taken, and the bone was pierced in the middle and a ring attached in the bone and bent round the back of it. During the growth of the bone the ring was found to cut the bone halfway through, showing that a deposit of bone had taken place backwards, and the ring had gradually crept forward. They then pierced another jaw with two holes, the ring in one case embracing the back of the jaw, and in the other case the forward. In the forward case the ring actually dropped away, showing that the jaw was gradually travelling backwards, and at the back of the jaw the ring was left right in the middle of the bone and a deep crease was formed by the cutting in of the ring. The illustrations proved indisputably what happened in the development and growth of the lower jaw, that the bone was deposited at the back and absorbed away in front. It was an experiment undertaken by Humphry and recorded by Witzel in his book.

EXTRACTION OF PREMOLARS.

MR. HEDLEY VISICK said he had a case showing the result of extraction of the first pre-molars, upper and lower, at the age of eleven, and he exhibited the model. The wisdom teeth erupted at seventeen, and he thought the result of the case was very good indeed. No plate was worn.

MR. RUSSELL BARRETT asked whether there was any irregularity which called for the extraction of the first bicuspid or whether it was done simply to make room.

MR. H. VISICK said the teeth were taken out simply to make room as the mouth was very crowded, and the teeth then arranged themselves in the position shown in the models.

MR. NORTHCROFT asked whether there were any models of the jaws before the age of eleven to show whether the canines were coming high in the arch or not.

MR. VISICK said the models were the only ones he had. As a matter of fact it was his own mouth and naturally at that age he was not very inquisitive on the subject. As far as he remembered, the canines were coming down all right. The upper front teeth were rather prominent and the lower incisors were overlapping each other.

The PRESIDENT said the result from the point of view of occlusion was really quite good, but the difference in the size of the jaw was plainly shown. He felt that if the teeth had been left in both arches would have been much larger.

The Meeting then terminated.



Digitized by the Internet Archive
in 2019 with funding from
Wellcome Library

<https://archive.org/details/s6867id1324598>

